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program

PUBLIC POLICY PROJECT: RESEARCH PLAN

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16. Abstract

This report defines the scope of the Public Policy Project, identifies specific research issues, and outlines methods for performing the work. A theoretical framework encompassing the various anticipated public policy impacts outlines the impact process and defines the basic concepts used in formulating the research approach. The Work Elements describing the specific work to be done are closely tied to the research issues identified in the theoretical framework. Details of data collection and analysis are contained in the Work Elements. The Research Plan outlines how the work will be performed by proposing a preliminary schedule, staffing requirements and estimates of level of effort.

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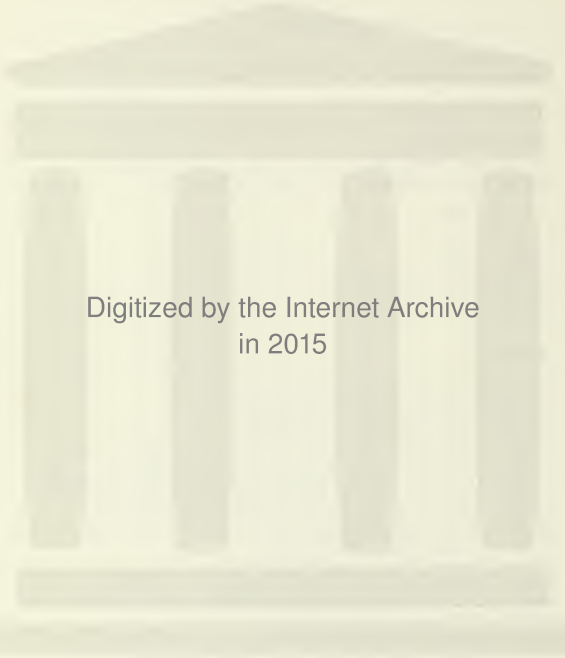

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1. INTRODUCTION

1.1 The Research Plan

The purpose of the Public Policy Research Plan is threefold, to define the technical scope of the project, to identify specific research issues and to outline methods for performing the work.

The efforts of Phase I of the Public Policy Project were directed at defining the scope of work, identifying appropriate methods and available data, and producing a Research plan. Phase II, which will commence in the Summer of 1976, will carry out the work described in the Research Plan. This document, which contains MTC's description of the work to be done and specific recommendations on how to do it, is therefore the principal reference for Phase II.

The Research Plan purposely, however, does not resolve all details of the proposed research. Some issues have not been completely defined in order to permit potential contractors some latitude in responding to the RFP for Phase II work in the Public Policy Project. The proposals submitted by potential contractors will be expected to refine the research approach and methodology documented in this Research Plan. Those refinements will permit the selected contractor to shape the project as they see most appropriate. The manner in which proposers refine the research will also be a consideration in contractor selection. After contractor selection and before contract award, MTC will prepare a draft Study Design and a Project Implementation Plan based on this Research Plan and appropriate refinements proposed by the selected contractor. The contractor will then finalize that Study Design/ PIP as his first work element in the project.

This somewhat complex process has been adopted in order to assure the greatest possible harmony between MTC objectives for the Public Policy Project and the selected contractor's capabilities and their concerns about how to conduct the research.

1.2 The BART Impact Program

The BART Impact Program is a comprehensive, policy-oriented study and evaluation of the impacts of the San Francisco Bay Area's new rapid transit system (BART). The program will identify and measure BART's impacts on the environment, travel behavior, the regional economy, land use patterns, public policy, and social institutions and life styles. The bulk of the work will be performed by contractors, with MTC providing program design, management, and synthesis and interpretation of the findings. The program is described in detail in A Description of the BART Impact Program, MTC, March 1974.

The objectives of the impact assessment program are to contribute to the making of better decisions on urban transportation and development at all levels of government, and to add to knowledge of these subjects, by providing answers to four kinds of questions:

> What are the impacts of BART on travel conditions, economic activity, land use, public policies, and other aspects of life in the metropolitan region?
>
> Who is affected by these impacts? In what manner are the impacts distributed among income groups, communities, and economic interest; and in what way do they affect ethnic and racial minorities, the elderly, youth, women, the handicapped, the transit dependent, and other groups of social concern?
>
> Why do these impacts occur? Of equal interest, why do some anticipated impacts not occur, or occur in a lessor or different way than expected?
>
> How can the fullest possible benefits be obtained from the Bay Area's investment in rapid transit, by complementary actions such as provision of feeder service, marketing transit service, and zoning of intensive devleopment around the stations? Equally important, how can the lessons of the BART experience be transferred to local governments and regional bodies in other metropolitan areas where investments in transportation improvement are being considered, and to other local, state and Federal governments for guidance of their urban transportation and development policies?

The BART Impact Program has been divided into six areas for purposes of management and contracting. These impact areas are:

> Transportation System and Travel Behavior
> Environment
> Land Use and Urban Development
> Public Policy
> Economics and Finance
> Institutions and Life Styles

In addition, two "cross-cutting" or integrating projects are also included in the BART Impact Program:

> Implications for the Transit Disadvantaged
> Federal Policy Implications

The Public Policy Project covers BART's impacts on the policies and actions of governments and on the political system through which governmental decisions are made. The implications of these public policy impacts and all other identified BART impacts for local policy decisions will also be covered in the Project in an interpretive manner.

1.3 Organization of the Research Plan

The five major sections of this Research Plan describe the Public Policy Project, its conceptual underpinnings, the strategy for conducting the research, the specific Work Elements which comprise the total effort and the schedule for carrying out the work.

Section 2 summarizes the project, outlining for the reader the objectives of the project and the scope of work. The details of work scope described in Section 2 are the general boundaries of the research proposed for the Public Policy Project.

The theoretical framework for the project is discussed in Section 3. The reader is first presented with some basic concepts and word definitions which are necessary to understand later discussions. The process by which impacts are expected to occur is then outlined with particular emphasis placed on tracing impacts through a causal network back to particular attributes of the BART System. The research questions which define the work to be done are then listed by the attribute of BART expected to cause that anticipated impact.

Section 4 outlines the role of the No-BART Alternative in determining impacts and discusses the methods proposed for carrying out the research. Following this is a discussion on data, encompassing use of secondary sources, new data collection and data coordination.

Section 5 specifies Work Elements. These are descriptions of 11 tasks which must be accomplished in order to fulfill the objectives of the project.

The final part, Section 6, is MTC's best estimate of schedule, staffing and level of effort.

2. BRIEF DESCRIPTION OF THE PROJECT

2.1 Objectives

The objectives of the project are to contribute to the making of better decisions about urban transportation and development at all local and regional levels of government, and to add to knowledge of these subjects by providing answers to more specific forms of the four basic questions. These questions ask about the

impacts of a regional rapid transit system on governmental policies and actions:

> What changes has BART produced in government policies and actions and in the functioning of the political process at the State, regional, and local levels (formation of new governmental units to facilitate dealing with BARTD and its impacts)?
>
> Who is affected, directly or indirectly, by these policy impacts (public officials, special interest groups, neighborhood organizations, taxpayers, the community at large, etc.)? Who or what groups help to formulate these public policy changes in response to an identified or anticipated BART impact (neighborhood groups near stations organized around issues of increased traffic congestion and illegal parking, local realtors urging zoning changes to permit intensive development adjacent to BART stations)?
>
> Why do these changes occur (municipal incorporation, adherence to BART's wage rates, Equal Employment Opportunity program, etc., by other local transit agencies) or not occur as anticipated (major re-zoning)?
>
> How can governments be encouraged to adopt policies that are beneficial to the community in response to BART (joint station development projects, local transit service community-wide and to BART)? How can negative impacts of BART be mitigated through public policy formulation?

In seeking answers to these questions, special attention will be paid to ascertaining how BART has affected minority groups and other groups of special concern such as the poor and the elderly, and to identifying measures that can be taken to enhance BART's positive impacts and mitigate any negative impacts on such groups.

Policy relevance will be a prime concern in designing the scope of the project, the specific queries to be addressed, and the presentation of factual and subjective results. All BIP Projects are designed so that their results are of interest to specific audiences and are applicable to other transit systems and urban areas. The Public Policy Project will study the behavior of the greatest range of actors in the public or political arena as they react to perceived and actual BART impacts. Local and regional elected and appointed public officials, local civic and neighborhood groups, representatives of the media, special interest groups, state legislators and policymakers, and other key informants will all be included in the scope of policy survey and analysis. This coverage of individuals

and groups will supply members of the BIP audience with transferable information, particularly on policy-making decisions that will be applicable, in some degree, to their own transit and political situations.

The audience to which all the BIP projects and activities are directed is broad, and stratified along levels of decision-making authority. The principal audiences are 1) the Nation and Congress concerned with priorities for transportation and urban development policies, 2) Federal departments concerned with improving policies and programs, administrative guidelines and assistance affecting State, regional and local development of integrated transportation and land use patterns, 3) state, metropolitan and local governments concerned with making decisions on investments and planning, design and engineering, construction and operation of future transportation systems.

Basically, the audience for BIP documents includes all members of the citizenry - legislators, public and private administrators, technicians, and the community at large - that are interested in some or all aspects of the BART experience and its impacts. The bulk of the BIP reports are written for a technical audience while summary reports are directed to the needs of public officials for comprehensive data. However, project data is compiled and published for the edification of the general public as well. The individual citizen plays the role of decision-maker by the nature of his power as a catalyst and an influence in the political system through his vote. In discussing the audience to whom the BIP and particularly the Public Policy Project is directed, the individual in the community of interested and active parties is also of primary importance as policy-maker.

In order to assure that the findings are useful outside the Bay Area, special efforts will be made in the research design to guarantee transferability. To be transferable the findings must not simply describe what happened in the unique historical, social, and topographical circumstances of the Bay Area in the 1960's and 1970's. Findings must be presented in a form that provides an understanding of how specific characteristics or attributes of the rapid transit system affect specific populations and socio-economic processes that might be found in other urban areas.

2.2 Scope of Study

The Public Policy project will cover the following areas of study:

2.2.1 Levels and Types of Government

The project will cover BART's impacts on the local governments of the BART service area, on the regional agencies of the Bay Area, and on agencies of the State of California.

The project will cover general purpose units of government (counties, cities), special districts, and regional or local agencies established by special state enactment or intergovernmental agreement.

2.2.2 Structural Elements of Government

The project will cover the various elements of the governmental system and the political process. These include the several branches of government and the main parts of the political system, which is the driving force behind governmental action.

2.2.2a Government

The project will cover selected units of government such as executive agencies, legislative bodies, regulatory agencies, and to a lesser extent, judicial bodies, so far as these have been affected by BART. Specific governmental units will be delineated later in the Research Plan.

2.2.2b Political System

At the local, regional and state levels, the project will cover political organization (formation of civic groups, interest groups, etc.); the attitudes of citizens, political leaders and public officials; media content; and political behavior (voting and other forms of influence on governmental decisions).

2.2.3 Functions

The project will focus on those governmental functions in selected municipalities or other areas that are most likely to have been affected by BART. These include provision of transportation service (highways, transit), traffic regulation, involvement in land use and development (zoning, planning, redevelopment), law enforcement, and taxing authority. Other functions will be covered to the extent that evidence of appreciable BART impact is uncovered.

2.2.4 Processes

The project will cover each of the processes by which governments function, including civic and political debate, elections, creation of organizational units, financing (taxes, property assessments, debt), planning, legislation and rule-making, and the various operations by which governmental functions are performed.

2.2.5 Area

The local portion of the project will cover the nine-county Bay Area, focusing primarily upon the three BARTD counties (Alameda, Contra Costa, and San Francisco) and parts of three other counties (Marin, San Mateo and Santa Clara). At the State and regional level, the State legislature, State and regional agencies, commissions, and special service districts will be included for study.

2.2.6 Time Span

The project will basically cover the period from 1962, when the BART bonds were approved by the voters of the three counties, through 1976. Data beginning with the mid-1950's when BART plans were proposed may be used in some cases, such as in establishing growth trends or zoning.

2.2.7 Relation to other BART Impact Program Projects

This project will not measure BART's impacts upon governmental service loads (local population, traffic volumes, etc.); this information will be provided by other projects as needed, in compliance with the projects' schedules. In the case of very specific demands for governmental action that are clearly due to BART's existence, the Public Policy Project will coordinate its data needs with other projects' data collection tasks (see Section 4.5).

In dealing with impacts on public finances (taxes, debt), the project will be coordinated with the Economics and Finance Project, which has been given responsibility for examination of such impacts. Information on BART's effects on land-use and development will be provided by the Land Use and Urban Development Project.

The interpretation of the implications of identified BART impacts for local government policy-making will utilize the impact findings of all six of the BART Impact Program Projects.

3. THEORETICAL FRAMEWORK

A theoretical framework, defining concepts and stating the manner in which impacts are presumed to occur, is essential to a successful and efficient identification and measurement of BART's impacts. The final research design should be based on an explicit statement of its theoretical framework, which should be employed in stating hypotheses or questions to be answered, identifying variables to be measured, analyzing data, and interpreting the findings and their implications for future policy making.

Such a theoretical framework should draw upon a combination of the overall theoretical framework of the BART Impact Program, the available policy-oriented literature on government and politics, and the thinking of the persons who are conducting the research. This chapter of the Research Plan briefly sets forth some concepts and relationships that play an important part in the theoretical framework of the BART Impact Program, and that have special relevance to the study of impacts on government and the political system.

3.1 Basic Concepts

The conception of BART's impacts on government and the political system may be summarized as follows:

> A set of decisions produced a BART system bearing certain attributes. These, and their impacts on travel, land use, etc., have produced impacts upon government and the political system by changing the inputs available to government and the expectations of and attitudes toward government. These changes have produced demands on government, expressed through a decision-making process which produces new decisions and changed outputs. For a full understanding of what has happened, one must examine not only the decision-making that occurred, but the manner in which inputs are converted to outputs (governmental processes) and the nature of the outputs (governmental functions).

3.2 The Impact Process

The following is a more detailed conceptualization of the Public Policy Project's theoretical framework:

3.2.1 The Governmental Process that Produced BART

Provision of a rapid transit system was necessarily a governmental undertaking. The concepts and theory needed to understand how governmental action produced BART will be equally useful in understanding how BART affected other governmental units and functions.

To obtain a rapid transit system, persons took the role of citizen, entered the governmental decision-making process, and made demands. In doing so, they usually acted through interest groups (based on economic interest, territory, professional orientation, etc.).

Government is continuously receiving a variety of demands, often stemming from many kinds of dissatisfaction. In response to some of those demands, governments make decisions to acquire inputs and to convert these into outputs, both composed of

various kinds of resources. (Outputs are usually discussed in terms of groupings called "functions".)

Most programs are carried out in complex situations, where many forces affect the outcome, and the consequences of an action are not readily predictable. Programs sometimes operate upon whatever variables are directly accessible to governmental action in the hope that these will lead to changes, by a chain of causation, in other variables that are the real objects of interest but are not so accessible.

It is therefore necessary to distinguish between the outputs of governmental action, which are the immediate manifestations of a program (provision of feeder bus service, traffic signals installed, etc.); and the outcomes, which are the ultimate and more or less intended results (reduction in traffic congestion, increased use of public transit). There arises a very real possibility that programs will have unintended consequences.

From this point of view, the BART Impact Program is an examination of the outcomes of the governmental program whose input is BART.

One cannot obtain a clear understanding of BART's consequences and why they occurred if the rapid transit system is treated as a single, monolithic and unanalyzed entity. Instead, it is necessary to identify those attributes of the BART program which may have affected outcomes, and to trace the consequences of each attribute--the effects that it has upon the physical environment, upon society, and upon governmental action. These direct effects are only the beginning of the story. They lead, in turn, to various indirect effects in the set of interdependent systems which constitute urban society.

Government and the political system may thus be affected either directly by attributes of BART, or indirectly by the effects that BART has upon other parts of society (the behavioral response to BART) or upon the environment (the physical impacts).

In order to understand BART's impacts on government and the political system, it is necessary to trace these impacts back to the specific attributes of the transportation system that gave rise to them. This path may often lead through intermediate impacts of other phenomena. The principal BART attributes and intermediate phenomena that may produce public policy impacts are listed in the following table, Figure 1, with examples of impacts on government and the political system.

Figure 1

BART ATTRIBUTES AND

INTERMEDIATE PHENOMENA

Attributes	Intermediate Phenomena, Actual or Anticipated (Examples)	Impacts on Government and the Political System (Examples)
The rapid transit organization	Attitudes of members of Board of Directors	Jurisdictional claims of related agencies
The rapid transit planning process	Attitudes of land owners, developers	Land use plans, zoning changes
Publicity about the system	Public attitudes	Voting, locational decisions
The taxes that pay for the system	Finances of households, firms, etc.	Tax levels of municipalities; amount of bonded debt
The utilization of labor resources	Labor agreements, operating costs	Terms of labor agreements of related agencies
The utilization of capital resources	Transit capital improvements	Changes in levels of service of Bay Area transit
The presence of facilities and operations	Noise, visual effects; development opportunities	Attempts by local governments to mitigate adverse environmental impacts or capitalize on development opportunities
The transportation service rendered	Travel behavior and location of new development	Highway construction; traffice regulation; zoning changes; changes in local transit service (reduction of routes, feeder service)

3.2.2 Responses by Persons in the Political System

These attributes of the rapid transit system produce changes in the situation within which governments are functioning. Persons form new expectations as they see that the rapid transit system may help (or perhaps hinder) the achievement of their purposes.

To achieve a purpose, a person defines possible courses of action and evaluates the likely results of each. Perceptions of the world and the way it works are organized into cognitive maps, which usually are far from complete, and include much uncertainty. Evaluation of alternatives is guided by a value structure which usually is incomplete and more or less inconsistent.

Persons then respond to the system partly by making new adaptations to the existing state of affairs (choice of a place at which to locate an establishment or conduct a transaction, choice of mode and route of travel, etc.), and partly by striving to secure change in the state of affairs through exerting influence either individually or collectively, in the political system (voting, lobbying, organizing special interest groups, etc.).

The governmental response is a product of a decision-making process in which the political system interacts with established government. The interaction occurs through persons occupying several roles, including (elected) officials, government personnel, (administrators and technicians) and citizens (who usually act through interest groups). The result is strongly affected by several parts of the political system, including its organization (factions and leadership, distribution of the resources needed to influence governmental decision-making, etc.), the prevailing attitudes relating to the subjects of governmental action (the aspect of the political system that is most likely to be affected by BART), and the laws and customs that determine how decisions shall be made.

In many of the responses to BART, more than a single unit of government is involved. Two municipalities may share an interest in development around a station near their boundary, or the State and a county may be involved in planning highway improvements in a BART corridor. The impacts on governments are thus partly dependent on the pattern of intergovernmental relations, and the impacts affect this pattern in turn.

Since human behavior is somewhat foresightful, much of the response to BART may be in anticipation of the changes that it will bring, though an important part of the response will only come when it has produced actual changes in the situation.

Of special significance in understanding the governmental and political response to BART is the relation of this response to the original intentions of the BART program. Governments may, by their actions, either complement BART and enhance its intended effects, or counteract it and prevent it from meeting the expectations of those who supported it. For example, a municipality may re-zone the area around a station for more intensive use, thereby encouraging the creation of urban centers at the stations, or down-zone it in order to preserve an existing pattern of relatively low-intensity development.

3.3 Research Questions

The research questions to be answered by the project are drawn from the theory of impact processes outlined above, and from the objectives and expectations about BART that have been enunciated by its planners and by many Bay Area public officials and citizens.

All of the research questions imply a comparison of some kind--mainly between the actual and the no-BART world or between the present and the pre-BART state of affairs. The usage of terms such as "increase" or "formation" does not imply a commitment to a particular type of comparison.

A more complete statement of research issues would need to take into account the many modifying factors that may affect the magnitude or nature of an impact. These include the many forces that are bringing growth and development to some parts of the BART service area but not others; the social and ethnic composition of a neighborhood which may limit the opportunities for BART-accessed development; the political composition of a community, which may result in either conflict over or a unified response to public policy decisions; existing local property tax rates, which may hinder further public investments in transit, law enforcement, and other municipal services; traffic congestion, which may cause a public outcry for strong traffic regulations and/or increased transit service.

It should be borne in mind that the research questions simply point to where impacts are expected to occur. They are only the first steps toward the ultimate findings, which should not only tell whether impacts did occur but also measure the magnitude of those impacts and assess their implications for all policy decisions.

The major Public Policy concerns identified for the Public Policy Project's study of BART impacts on local (city, county, regional, special district, state) government sectors are as follows:

1. Governmental Structure and Organization

2. Local (city, county, regional, special district, state) Government Financing

3. Local Government Costs (public services)

4. Law Enforcement

5. Land Use and Urban Development Plans and Policies

6. Provision of Local Transit Service

7. Traffic Regulation

8. Highway Improvements

It should also be recognized that BART is likely to vary in influence on most of the phenomena in the list. In most cases, other variables, generally political or economic, may be far more influential than the presence of BART (such as changing public attitudes towards the environmental impact of state highway plans, or a national trend towards regional governments with planning capabilities). This fact places a premium on carefully refined research issues and sharp methods of analysis.

The principal expected impacts, expressed as research questions are as follows:

IMPACTS RESULTING FROM BART'S ORGANIZATION

--From the time the BART District was established, it constituted a governmental agency with staff, resources, and a mission. By interacting with other governmental units (making requests, setting an example) it may have influenced them.

Governmental Structure and Organization

1. Does the creation of the BART District as a regional transit agency cause

   a. the formation of new governmental units to deal with BART and its impacts?

   b. the strengthening or other alteration of existing governmental units to deal with BART?

2. Does BART's particular management and organizational structure influence subsequent actions of state or regional agencies?

3. Do existing governmental units such as MTC have to change the method by which state and regional transit funds are allocated to transit operators?

IMPACTS RESULTING FROM BART'S PLANNING PROCESS

--The rapid transit agency promptly made itself known by engaging in a planning process in which other governmental units were informed about the prospective rapid transit system and encouraged to adapt their own plans and programs.

Governmental Structure and Organization

4. Do local governments create internal planning departments or similar functions to deal with BART?

Land-Use and Urban Development Plans and Policies

5. Do municipalities rezone land adjacent to BART stations to

   a. encourage intensive development?

   b. maintain the existing character of the neighborhood and prevent development?

6. Do municipalities plan redevelopment or renewal projects to capitalize on access to BART?

   a. Do municipalities anticipate a major revitalization of the CBD due to the planning of a rapid transit station in that area?

   b. Do municipalities take further steps to capitalize on this anticipated revitalization? By the "value capture" policy of taxation?

7. Do municipalities encourage joint station development with BART? By what methods?

Highway Improvements

8. Did the BART system cause a reduction in total miles of highways and trans-Bay bridges planned for the Bay Area?

   a. Was proposed highway construction paralleling the BART alignment decreased?

   b. Was proposed highway construction to access BART stations accelerated?

9. To what extent did CALTRANS cooperate with BARTD on the BART alignment in proposed highway medians?

   a. Did any state policy guidelines result from joint highway-BART construction?

   b. Did local/county level cooperative groups alter their highway facility recommendations on the basis of BART's planning?

IMPACTS RESULTING FROM BART'S PUBLICITY

--The BART District and its supporters engaged in extensive publicity efforts on behalf of the rapid transit system. This may be expected to have affected the attitudes of citizens and public officials, and perhaps raised their levels of expectation about BART and its impacts.

10. The issue of publicity impacts basically concerns changes in political behavior by both the community at large and the public officials. These effects will not be studied as outputs of BART, but rather as an integral part of the conversion process or political system that affects governmental decision-making.

    BART publicity affects attitudes. These changes in attitude in turn are expressed through representatives of the media, voting, neighborhood and other civic organizations, lobbying, and other methods by which the community makes demands on government to bring about a public policy change.

    For this reason, BART publicity, as well as all other defined BART attributes, will be analyzed as to their effects on political behavior, and ultimately on public policy making.

IMPACTS RESULTING FROM BART'S TAXES

--The BART decisions included the imposition of a sizable tax burden on properties and retail sales in the three counties. This has doubtless influenced the attitudes of the taxpayer citizens, and may impose a restraint upon other governmental units depending upon taxation of the same properties and persons.

Local (city, county, regional, special district, state) government financing

11. Has the incidence of BART taxes reduced the ability of governments to further tax the same sources (property taxes, sales taxes)?

12. Do governments have to look for other than tax sources for funding major public projects?

    a. Has incidence of BART tax reduced the level of operating or capital expenditures of municipalities in order to maintain balanced budgets without further raising taxes?

13. Has the incidence of BART taxes affected the tax assessment for other public transit systems in the three-county BART District?

IMPACTS RESULTING FROM BART'S UTILIZATION OF RESOURCES (LABOR)

--The rapid transit system represents a merging of specific kinds of resources. In particular, BARTD's utilization of labor may have influenced other governmental units by setting a pattern for their labor agreements.

Local Government Costs

14. Do other transit agencies adopt BART's pay scales, work rules, equal employment opportunity program, benefits package, etc.?

IMPACTS RESULTING FROM BART'S FACILITIES AND OPERATIONS

--The mere presence of rapid transit structures and the operation of trains upon them can have significant impacts upon the physical environment and thereby upon people (noise, views, etc.). The persons affected may strive to protect themselves by responding through the political system and through their local governments.

Local Government Costs (Public Services)

15. Does the level of local public services and their costs increase because of the location of BART facilities in the community (police, traffic control, street maintenance, parking regulations, etc.)?

Law Enforcement

16. Does police patrol increase near BART stations in response to traffic, parking, and pedestrians, and crimes such as auto vandalism and assault?

17. Does the public's and agency officials' attitudes towards community safety and security change with the intrusion of a major transit facility?

Land Use and Urban Development Plans and Policies

18. Do public officials integrate BART facilities with community development plans and facilities, and vice versa?

19. Do governments encourage the location of public-use buildings and public institutions within easy access to BART?

    a. by re-zoning?

    b. by granting incentives (example - floor area bonuses) for new construction to access rapid transit?

20. Do local governments adopt or apply special developmental criteria for new land use developments stemming from BART?

21. Do local governments respond to the growth of new housing stimulated by BART with new housing (or other land-use) policies?

Traffic Regulation

22. Does increased pedestrian and vehicular traffic in the vicinity of BART stations warrant or necessitate new traffic controls (barriers, traffic lights, crosswalks)?

23. Does BART parking spill over onto city streets, increasing

    a. the need for parking regulations and patrol in nearby parking lots and streets?

    b. the need for local negotiations with BARTD on parking lot expansion?

24. Does increased vehicular traffic on nearby streets and roads increase the level of local street maintenance (widening, re-surfacing, upgrading)?

IMPACTS RESULTING FROM BART'S TRANSPORTATION SERVICE

--The service rendered by the rapid transit system, bringing changes in accessibility and offering people a new kind of travel experience, brings changes in travel patterns. Changes in land use patterns (including property values) may follow. The new flows of people and vehicles and new urban development (or the possibility of it) may bring new service loads for government, new tax sources, and new issues to be resolved.

Local (city, county regional, special district, state) government financing

25. Does BART's share of regional transit funds create a disproportionate drain on funds to other transit agencies (San Francisco MUNI and AC Transit)?

Provision of Local Transit Service

26. Do existing local transit operators change their bus routes and schedules?

    a. to access BART stations and peak commuter travel?

    b. to accommodate anticipated and/or actual changes in other travel patterns?

27. Does coordination of transit services between local operators and BARTD exist to accommodate changes in schedules, fares and transfers, express bus routes, reduction in local service, etc.?

    a. Why were recommendations by the Northern California Transportation Demonstration Project on Bay Area transit service coordination not fully implemented in the early 1970's?

    b. Does a strategy exist for compensation to local operators who experience reductions in ridership due to BART with accompanying loss of revenues and employees?

28. Do communities tend to implement new transit service where no local service existed to access BART?

29. Does the planning and operation of a rapid transit system in developing communities create an impetus for implementation of local city-wide transit service?

    a. Do voters in the BART District vote to tax themselves for provision of local bus service or do they opt for limited service funded by other than property taxes?

Highway Improvements

30. Does heavy traffic to BART stations require improvements to access highways (additional on-off ramps, timed highway entrances, widening access ramps, new highway signs, etc.)?

4. RESEARCH STRATEGY

This chapter sets forth the overall research strategy of the Public Policy Project. It describes in general terms the kinds of research methods to be employed and the data to be used in studying the effects of BART on governmental functions, the public response through the political system, and the resulting public policy impacts. The implications of BIP identified BART impacts for local policy decisions, one of the key outputs of the BART Impact Program, will be treated in the final work element.

4.1 Scope of Work

In order to secure as full an understanding as possible of BART's governmental impacts, the project will analyze impacts in four ways. First, the impacts of BART on the processes and functions of government will be examined. This effort should be relatively small since many of these impacts can be identified by the other BIP projects. The Public Policy Project will define the responsibilities of the five other BIP projects to indicate the existence of BART's impacts on governmental functions. The requirements of the other BIP projects are for an alertness to possible governmental function impacts (as identified in Section 3.3) when studying their own particular kinds of impacts.

The five other BIP projects will then inform the Public Policy Project of actual or likely instances of BART's impacts on local government functions. This transfer of information will take place informally, either through a meeting of Project Managers and APM's or through a short deliverable.

Concurrently, the Public Policy Project will interview a few selected key informants and conduct a general document search of newspaper clippings, BARTD files, and resources at the Institutes for Transportation Studies, for Urban and Regional Development, and for Governmental Studies at U. C. Berkeley. These tasks plus any preliminary impact data collected from other BIP projects will help refine the central policy issues on which the Project will focus and perhaps bring new public policy issues to light for possible study. Any other basic data needed by the Project and not available from any of the five other impact projects will be the responsibility of the Public Policy Project contractor.

Second, the Project will study the manner by which an identified impact is converted into a public policy. This conversion process involves the political behavior by which political institutions respond to a given or assumed BART impact by formulating and implementing a public policy decision. The major components of political behavior to be examined are: (1) the influence of the media, basically Bay Area newspapers; (2) voting behavior on transit and transportation related issues; and (3) the role of local formal and informal political organizations. Interviews of public officials, key actors in neighborhood organizations and special interest groups, newspaper reporters and other representatives of the media would be most appropriate. An analysis of the

few transit-related referendums since 1962 will also be conducted, emphasizing any references to BART in the campaigns. A survey of public attitudes towards transit and, more specifically BART, will be conducted in conjunction with the other BIP projects' planned home interview surveys. The conversion process or the analysis of political behavior will be an integral part of all Public Policy work elements.

Third, the public policy impacts of BART in several policy-oriented case study areas will be identified in this Project. The Project will focus on the eight major categories of Public Policy concerns in a number of selected case study municipalities. A general uniform method of data collection and analysis will be used for all case study areas. This work element is basically a study of decision making, and the methods for study of decisions do not differ greatly between types of governments or functions. The principal methods of study will be interviews with key informants and public officials and examination of published and documentary sources. The methods of analysis are primarily qualitative interpretations of the manner in which governmental decisions are affected by BART.

Fourth, the Public Policy Project will interpret the implications for local policy decision making of BART impacts identified in all BIP projects. This analysis and synthesis will present the opportunity for interpretation of all BART impacts from a broad overview perspective.

4.2 Comparisons

The research will be conducted largely in a comparative format. Studies of impacts on specific decisions, policies and programs will employ a variety of comparisons, including comparison of the present state of affairs with pre-BART trends, comparisons of actual decisions with what the decision makers say they would have done in the absence of BART, and comparisons between differing municipalities selected for case studies. Such comparisons are appropriate means of identifying and measuring the impacts of specific BART attributes in specific situations. These specific impacts can only be understood by comparing them with the results that would have flowed from some other attribute that might have been incorporated in the design of the rapid transit system.

The major Public Policy decisions will also be compared with an alternative transportation system together with the associated financing arrangements (the No-BART Alternative or GNBA Transportation System). This kind of comparison is needed for an assessment of the overall effects of the basic decision to build and pay for BART, which can only be assessed by comparison with an alternative course of action. It is also needed to assure that BART's true net impacts are distinguished from the many other changes taking place in the region, which would have occurred in more or less the same way even if BART had not been built.

4.3 The No-BART Alternative

In the absence of BART, it is highly likely that the region would have invested in some other set of transportation improvements, in addition to those now in existence. The No-BART Alternative (NBA) represents an informed judgement as to the kind of transportation system that would have resulted in the absence of BART. It calls for a two-stage set of comparisons. The first stage NBA compares existing (1976) BART with a transportation system which is much like today's, less BART. The main components of this stage of the NBA are described in A Generalized No-BART Alternative (GNBA) Transportation System, a report produced by the BART Impact Program.[1] The second stage compares existing (1976) BART with the "Do-Nothing" NBA, described as the pre-BART system (1971) in place for 1976.

Descriptions of the two types of No-BART Alternatives will be given to each contractor for use in projecting the likely consequences of the NBA -- to Transportation System and Travel Behavior for projection of travel behavior and traffic patterns; to Environment for projection of the NBA's noise, visual character, and other environmental effects; to Economics and Finance for projection of the local tax rates that would have prevailed if BART taxes were not strengthening taxpayer resistance; etc. The results of such projections will be fed from one project to another to permit comparing the impacts of the No-BART Alternative to BART.

The Public Policy Project will make generalized projections of the likely governmental and political consequences of each form of the No-BART Alternative. These projections will be highly theoretical due to the difficulty of forecasting political behavior. The differences between the projections and the actual state of affairs will be interpreted as the net impacts of deciding in favor of BART instead of the indicated alternative.

4.4 Methods of Analysis

Unlike the other BIP projects, the Public Policy Project does not have a wealth of literature on its field of endeavor to rely on for research and methodological guidance. There are no widely accepted policy models, research designs or studies which even attempt, in a systematic manner, to measure the impact of a fixed rail transportation system upon public policy. There are studies which purport to measure the impact of a policy or set of policies upon society as a group or even a physical setting, but none which attempts to measure the impact of a transportation system upon multiple levels of government and the community political process. Therefore, while a highly empirical research strategy is recommended, additional methods of analysis and data collection may be employed where tailored to the needs of particular research questions. The entire research strategy and analysis plan should take account of the relative importance of the subjects under study, the state of knowledge about the phenomena, the availability of proven techniques, and the costs of alternative approaches.

[1] A Generalized No-BART Alternative (GNBA) Transportation System, MTC, May 1975, Document Number FR 1-14-75.

It is particularly important that the methods of analysis be adapted to the level and nature of the knowledge that exists about the subject at hand. This knowledge can be more or less precise. At one extreme, the theory concerning the subject may be well developed and generalizable so that the impact process is understood, most parameters are known, and data needs clearly indicated.

At the other extreme, neither the impact process nor the parameters of relationships are understood. Theory on the subject is not well developed, generalizations cannot be made, and the subject population is ill-defined. Very little is known except that phenomena can be described in some empirical terms; but even then, the precision and validity of the description can be questioned.

Somewhere in between these extremes in a partial understanding of the impact process and the relationship parameters. In some cases, the structure of the impact process is strongly suspected, but parameter values are unknown. In other cases, theoretical constructs may be weak, but parameters are strongly suspected. Most methods to be applied in this project fall within this middle range.

The following statement on methods and the subsequent one on data should be viewed as recommendations for setting up research strategies for each Work Element. The methods recommended are for the most part generic and offer the contractor considerable latitude in formulating and proposing an optimal approach. Where MTC has been able to appraise a research issue in depth, more definitive recommendations on methods and data are made. These recommendations are minimum requirements and should be followed unless convincing arguments to the contrary can be presented.

4.4.1 Descriptive Statistics

This term applies to the use of quantitative data in situations where careful analysis and interpretation are needed and can be ascertained with a certain degree of validity. Much analysis of secondary data such as census data or voting records falls into this category. The available techniques cover a broad range from simple measurement and comparison of magnitudes to in-depth probing for relationships and application of various measures of association.

This approach often has a large cost advantage, especially where the main concern is not with precise understanding of causal processes but with measurement of an existing state of affairs or a trend for incorporation in a larger interpretive network.

This type of analysis will be employed in a few of the Work Elements, such as the tabulation of voting trends on transit issues.

4.4.2 Qualitative Analysis

Qualitative analysis will be a major method of study in all the Work Elements, particularly since little quantitative data and analysis can be used. Among the data sources that will require qualitative analysis are the key informant interviews, the survey of media influences and political organizations, and most data inputs from other BIP projects.

4.4.3 Empirical Case Studies

Empirical case studies apply a variety of research methods to a specific situation in order to probe more deeply into the phenomena under study, to obtain a more complete understanding than can be gained through a single method of analysis, to observe the interaction among differing elements of study, and to synthesize the results in a way that reveals the full significance of what has been found.

In the Public Policy Project, all Work Elements will be intensive case studies. The major focus will be on selected municipalities, to be chosen in conjunction with the other BIP projects, particularly the Land Use Project, which will conduct policy-oriented case studies of selected station areas.

4.4.3.1 Intensive Case Study Areas

The following areas have been preliminarily selected for this project's intensive case study sites:

San Francisco and Oakland - the two largest urban areas, with strong central business districts and residential areas inhabited by minority groups, in which BART, with multiple stations, is anticipated to provide significant and diverse impacts.

- San Francisco
  - Central Business District (Embarcadero, Montgomery Street, Powell Street, and Civic Center station areas)
  - Mission District (16th Street and 24th Street station areas)
- Oakland
  - Central Business District (12th Street, 19th Street, and Lake Merritt station areas)
  - Rockridge station area

Walnut Creek - a homogeneous suburban area with limited local transit service, experiencing growth pressures and containing

undeveloped land, in which the local government commissioned planning studies of development possibilities adjacent to a BART station.

Berkeley - an area where especially significant governmental action has occurred in response to conflicts between perceived and actual BART impacts and the desires of local citizens and officials over the alignment of BART through the city (Ashby, downtown Berkeley, and North Berkeley station areas).

Fremont - a terminal station area, experiencing development and growth pressures in its housing, industrial, and business sectors.

Other possibilities include Richmond, an older industrial area experiencing a decline in its CBD; Lafayette, a recently incorporated suburban area; and Concord, the eastern terminal station with no local transit service, much unincorporated land, and pressures for development.

In the Public Policy Project, the eight categories (as defined in Section 3.3) will be studied in each selected municipality for possible public policy impacts. Each municipality may not experience an impact in all eight categories of public policy concerns, but the absence of an anticipated impact should also be studied to ascertain what combinations of local governmental action and the community's input to the political process caused a "non-impact".

4.4.3.2 Additional Selected Study Areas

In a narrower context, some studies will be done outside the above mentioned municipal case studies. These studies will include impacts on regional agencies (MTC and ABAG), impacts on state agencies (CALTRANS and its highway plans and policies), and single significant impacts on municipalities not selected for the broader eight category impact survey (the incorporation issues in Moraga and Lafayette, the vote for local transit in the Neward - Fremont - Union City area). These case studies will only be a few in number; because they constitute key points in the BART experience, they should be analyzed.

4.4.3.3 Data

Data sources to be employed include key informant interviews, secondary data, surveys on law enforcement and land use from other projects, and surveys to be done by this project.

4.5 Sources

Data for assessment of BART's impact on public policy will come from a variety of sources. The project's data collection activities will be designed to obtain data in a form that can be utilized by other BIP projects and activities.

4.5.1 Secondary Data

Secondary data for use on this project includes the U. S. Census, voting records of case study municipalities, state transit and related legislation, municipal general plans, Bay Area newspaper files, BARTD files, BART station area planning studies, data files at the Institutes for Governmental Studies, for Urban and Regional Development, and for Transportation Studies at U. C. Berkeley, and various survey activities documented in the early stages of the BART Impact Program.

Sufficient time and effort should be allotted for gaining access to and use of this data since it is widely dispersed throughout the Bay Area and may not be in a readily available format for immediate use by project staff.

4.5.2 Data from Other BART Impact Program Projects

Data inputs from the other projects of the BART Impact Program are as follows:

- Transportation System and Travel Behavior - data on BART's effects on local transit service such as reductions in routes and re-routing; data on public transit operating costs; some data on street and highway improvements, BART parking lot expansions, etc; and measures of accessibility of the actual BART and the projected No-BART systems.

- Environment - data on citizens' perceptions of their safety and security around BART stations and alignment, key informants' measures of problems with traffic circulation, parking, developmental quality; other information on environmental impacts of the BART and No-BART facilities and operations which may affect the community's response to transit and the local government's actions regarding public services, land use policies, and taxing abilities.

- Economics and Finance - data on local property tax assessments; survey of public officials' attitudes about effects of BART bonds on local government financing; comparative analyses of voting behavior on various local bond issues in the BART District and other selected areas.

- Land Use and Urban Development - information on changes in zoning and in the pattern and distribution of land use and development, particularly around BART stations, in both the actual BART and No-BART worlds.

- Institutions and Life Styles - information on the role of community political organizations in selected BART station areas.

4.5.3 Original Data Collection

Original data to be collected as needed will include interviews with selected public officials, community organizers, media representatives,

and other key informants, surveys of community attitudes about BART and resulting governmental responses, and data on transit vote behavior.

The kinds of original data to be obtained by the Public Policy Project are described in general terms for each Work Element. It should be noted that use of surveys does not necessarily imply separate survey activities. An effort should be made to consolidate surveys within this project, and where possible, to consolidate survey questions with other projects to eliminate duplication of effort and conserve resources.

4.5.4 Survey and Data Coordination

A Survey Coordination and Monitoring Plan for the BART Impact Program has been established. The purpose of the survey coordination plan is to facilitate the coordination of data gathering efforts within the Program by defining a procedure to monitor the development of all plans and activities associated with the collection of data. The plan proposed is intended to assist rational decision-making in order to maximize the return to the program for the investment of resources in data gathering and analyses. The plan, which is not intended just as a mechanism to eliminate redundancy, may support the decision to undertake separate data gathering efforts that appear to provide the same information when, in the larger context, it is more efficient to do so. Such decisions must be based on complete and current information and must be subject to constant review in the light of changing and emergent project needs.

The first step toward the development of a data monitoring procedure has already been taken by the creation of a "data catalog" within the MTC system. The Survey Coordination and Monitoring Plan has also been designed, to provide information needed for managerial decision-making. The plan includes recommendations for expanding the current data catalog to include "virtual" data sets (planned data gathering activities) insuring a single, central source for the review of past, current and planned data acquisition activities. The descriptions of "virtual" data sets will include dates, standard names for variables and variable groups, and descriptions of subject populations and units of analysis. Routine updating of the catalog will be made to permit a rapid and efficient search for data, variable, or population overlaps in planned and existing data activities.

This coordination effort will be particularly important for the Public Policy Project. Since many direct impacts of BART, as studied by the five other projects, are inputs to public policy changes, careful monitoring will enable this project to obtain data from other BIP activities and projects where timely and feasible.

5. WORK ELEMENTS

This section describes the set of Work Elements into which the project will be divided. Most Work Elements involve the study of specifically identified anticipated impacts. Three Work Elements call for preparation of specific research documents and interpretive reports.

The Work Element descriptions contain key questions which are intended to focus the research on the principal kinds of impacts that MTC believes are likely to have occurred and to be worthy of study. These questions should be expanded and refined as needed in the early stages of the project. Special effort should be made to identify significant impacts not embraced by these questions.

All questions imply a comparison of some kind -- mainly between the present and the pre-BART state of affairs or between the actual and the No-BART world. The impact questions can be refined and elaborated at length by casting them in terms of specific areas and other variables. For example, the hypothesized impact on municipal zoning and other land use policies permits making a distinction between urbanized areas facing a decline in their central business districts and newly developing areas with a desire for intensive development. Again, the hypothesized impact on provision of local transit service is likely to be greater in an area with little or no public transit than a municipality with good local transit that only requires some re-routing to complement BART.

It should be borne in mind that the questions, asking simply whether an impact occurred, are only the first step toward the ultimate findings, which should not only tell whether impacts occur but also measure the magnitude of those impacts and assess their implications for all local policy decisions.

The research and ultimate presentation of findings should take into account the many modifying factors that may affect the nature or consequences of an impact. BART as an influence on the governmental and political process is only one factor among many others that could contribute to a public policy change. These modifying factors include, for example, the local political climate regarding increasing property tax assessments for public service expenditures; special interest groups (realtors, business organizations) and their influence on local land use decisions; the availability of Federal funds for urban renewal or redevelopment projects, etc.

The Work Elements are specific in terms of the areas chosen for study. Some flexibility is allowed in site selection of additional single-impact case studies. Otherwise, all Work Elements will adhere to the case study areas as recommended in Section 4.4.3.

5.1 Preparation of Study Design and Project Implementation Plan

The purpose of this Work Element is the preparation of the major project document needed to begin planning, research activities and project management. The Study Design will build upon the Research Plan and be a clear and concise description of the research to be undertaken. The Study Design shall be derived from this Research Plan and the selected contractor's technical proposal.

5.1.1 Conceptual Framework

The Study Design shall include an overview of the project that generally presents the conceptual framework for the process by which BART might affect public policy decision making. The political and governmental processes that might be significantly impacted by transit improvements, and descriptors or measures of public policy impact should also be discussed. These aspects of the public policy impact process shall then be related to the BART Impact Program.

5.1.2 Technical Approach

The Study Design shall include a discussion of the general technical approach and detailed methodologies for conduct of research into BART impacts on public policy decisions. The scope of each work element shall be described, including the factors, measures, relationships and testable hypotheses that will be the basis of the work element; the technical approach for each work element; the data requirements and associated impact assessment program, including geographical and classification parameters of the sample and pertinent data sources; recommended analytical procedures and how they are expected to answer the important questions.

5.1.3 Project Implementation Plan

A Project Implementation Plan (PIP) shall present a detailed management-oriented description of how the work as described above will be implemented.

The PIP shall include the Phase II work flow diagram, time schedule, and across-project-input requirements. The PIP shall also include appropriate work flow diagrams and charts indicating labor, financial and other resources required for each work element. The PIP shall describe the deliverable products and delivery dates associated with each work element. The time schedule shall include time for review of draft products. Summary labor charts shall specify individuals and the number of hours devoted to each subtask.

The PIP shall demonstrate that information gathering efforts proposed for the project are: (1) tailored to the needs of the Project; (2) not unnecessarily redundant with other data collection efforts and surveys of the BIP; (3) reasonably complementary to information gathering efforts of other BIP projects and activities. Because of the management orientation of the PIP, the project management monitoring and control procedures shall be delineated, including those of MTC as well as those of sub-contractors selected to assist in project implementation.

5.2 Study of Governmental Structure and Organization

Purpose

To determine whether any changes in structure and organization occurred in governmental units (municipalities, counties, special districts, the state) and regional agencies (ABAG, MTC) due to BART's planning and operation.

Research Activities

1. Municipal Incorporation

Secondary data will be surveyed initially followed by key informant interviews with members of BARTD's Governmental Relations staff and with public officials, observers, and members of special interest groups in the areas in question. Interviews will be conducted selectively and could be done through a mail questionnaire or by telephone. Special effort should be made to contact potential interviewees familiar with the historical background of the incorporation issues, since many areas incorporated in the mid-to-late 1950's and early 1960's.

The areas for study include Fremont, Lafayette, Pleasant Hill, and Moraga.

Research Questions to be Answered: 1, 4.

2. Formation or Alteration of Regional Agencies

Some secondary data may be utilized, but this question will best be answered by interviews with selected members of ABAG and MTC staffs. A few key state officials or legislators who drafted legislation to create MTC should be interviewed if possible. Again, BARTD staff should be queried for their reaction to the hypotheses.

Research Questions to be Answered: 1, 2, 3, 4.

5.3. Study of Local (Municipal, County, Special District, Regional, State) Government Financing

Purpose

To determine the direct and indirect effects of BART taxes on the ability of local governments to further raise taxes for other public projects and general funds. Also, to determine the effect on other BART service area transit agencies of BART's sharing in State allocations of transit funds (Transit Development Act monies).

Research Activities

1. Municipal Financing

Data will be collected in the Economics and Finance Project on the experience with tax rate increases in areas taxed for BART. Voting behavior on general obligation bond issues will be tabulated and analyzed. The E&F data will be supplemented by interviews with local government financial officials.

The Public Policy Project will conduct interviews with local public officials to ascertain their judgment of the effect and consequences of BART bonds and taxes on municipal tax rates and bond financing. These judgments will be summarized, evaluated, and interpreted in conjunction with findings from the Economics and Finance Project for each municipality selected for the intensive case studies.

Research Questions to be Answered: 10, 11, 12.

2. Local Transit Financing

This study will begin with preliminary analysis of secondary data; and will proceed with interviews with informed professionals in county government, key staff members of the major BART District transit systems (BART, A. C. Transit, and San Francisco Muni), and the transit financing staff at MTC and in the Legislature.

Research Questions to be Answered: 10, 13, 25.

5.4 Study of Local (Municipal, County, Special Districts, Regional, State) Government Costs

Purpose

To determine the effects BART has on the level of local public services in areas around BART stations and alignments,

and subsequent local costs. Also, to determine the influence of the BART organization on wage rates, benefits packages, etc., of other local public transit agencies.

Research Activities

1. Municipal Public Service Costs

Preliminary data will be supplied by the TS & TB Project on overflow parking, street and traffic control improvements, and other BART-access related changes made in station vicinities. Some interview data with local police officials and surveys of public perceptions about safety and security near BART stations will be collected by the Environment Project. The Public Policy Project will then collect supplementary information from other public officials (police, public works, and municipal administrative personnel) on actual related municipal cost data.

All municipalities chosen for intensive case studies will be covered.

Research Questions to be Answered: 10, 15.

2. Local Transit Labor Costs

Secondary data will be examined for statement of BART's labor agreements and the relationship of these to San Francisco Muni and to A. C. Transit. This question is relatively minor and subsequent interviews with informed professional staff of each transit agency should provide valid judgments of the extent and outcome of BART's influence on transit labor costs. Current (1976) data on the operating costs of BART and A. C. Transit will be collected by the Economics and Finance Project.

Research Question to be Answered: 14.

5.5 Study of Law Enforcement Services

Purpose

To determine the effects of BART operations on the level of police services in the vicinity of BART, particularly in response to community demand for increased police patrol and regulation of parking, traffic, and vandalism problems.

Research Activities

Data from other studies (see Work Elements 5.4.1 and 5.8) will be used to illustrate changes in the level of local

police services in the vicinity of BART stations. Original information will be on the community's perceptions of the need for such services and their demands made on the political process through organizing neighborhood groups, petitioning, lobbying, etc. This data collection effort will involve surveys of local newspapers and interviews with neighborhood groups leaders and police. All case study sites will be surveyed.

Research Questions to be Answered: 10, 16, 17.

5.6 Study of Land Use and Urban Development Plans and Policies

Purpose

To determine the response of the community and the municipal governments to actual and anticipated changes in land use, development patterns, demands for housing and intensive development, etc., due to BART's planning, operation, and physical facilities.

Research Activities

Examination of preliminary secondary data will be the initial task in order to gain familiarity with the range of land use impacts and their consequences. Much of the basic documentation will be collected by the Land Use Project. Information on problems of development in environmentally sensitive areas around BART stations will be provided by the Environment Project.

This task will identify the manner in which land use and urban development patterns resulting from BART and the private response to it culminate in municipal public policies. Policies adopted in anticipation of major BART impacts and policies adopted after BART began to affect land-use to some degree will both be studied. Examples of anticipatory public policies include re-zoning land around stations to encourage commercial or high-density residential use; formulation of redevelopment or urban renewal plans for commercial and/or residential districts near a station that are experiencing an economic decline, etc. Public policies implemented in response to actual land-use impacts include re-zoning to preserve the existing characteristics of a neighborhood threatened by BART-induced development; special variances granted for new construction which has direct access to a BART station; environmental criteria applied to new, particularly high-density, development, etc. All case study areas will be studied.

Research Questions to be Answered: 4, 5, 6, 7, 10, 18, 19, 20, 21.

5.7 Study of Provision of Local Transit Service

Purpose

To determine the effects of a regional rapid transit system on existing and planned local bus transit services.

Research Activities

1. Existing Local Transit Operations

   Documentation of changes in levels of service, routes, schedules, etc., will be provided by the TS & TB Project. This basic data will be examined in preparation for interviews with professional staff of the various Bay Area transit operators including BART. All case study sites will be studied.

Research Questions to be Answered: 10, 14, 26, 27.

2. Proposed or New Local Transit Service

   Data will be collected on local transit service that has begun since BART's trans-Bay operations, and on proposals for similar local transit in other areas. Political behavior data, particularly on voting and organized community group actions, will be gathered and tabulated where possible for analysis of public attitudes toward local transit, especially feeder service to BART, and toward BART service in general. All case study sites will be surveyed briefly but emphasis should also be placed on the analysis of voting behavior on the issue of local transit, i.e., Contra Costa County's negative vote versus Fremont-Newark-Union City's vote of approval.

Research Questions to be Answered: 10, 28, 29.

5.8 Study of Local Traffic Regulations

Purpose

To determine the effects of increased vehicle and pedestrian traffic in the vicinity of a rapid transit station.

Research Activities

Some data on street maintenance and improvement programs, overflow parking and plans for its control, new traffic lights, barriers, etc., will be supplied by the TS & TB Project (see Work Element 5.4.1). Interviews with municipal and county public works professionals will query the relation of BART operations to these various changes

in traffic regulation. Key staff members of BARTD's Governmental Relations Department will also be interviewed to establish the process and outcome of negotiations with local government over responsibility for these traffic and parking improvements. All case study sites will be studied.

Research Questions to be Answered: 10, 22, 23, 24, 30.

5.9 Study of Highway Improvements

Purpose

To determine the effect of a regional rapid transit system on State highway plans and policies.

Research Activities

Some original documentation of State highway plans for the Bay Area prior to BART's design will be collected by the TS & TB Project. Key informant interviews will follow examination of this data to determine State governmental action in response to BART's planning. Potential interviewers include both CALTRANS and BARTD professional staff as well as other key observers such as state legislators and county and municipal public officials. The relationship between BARTD and CALTRANS as governmental bodies as well as transportation agencies will be studied in the light of their joint cooperation in the planning and construction of BART. Highway 24 in Contra Costa County will be a major focus of study.

Research Questions to be Answered: 8, 9, 30.

5.10 Preparation of Final Report

This Work Element will integrate the findings of all the preceding Work Elements, producing an in-depth synthesis of the results obtained by complementary methods (such as interview surveys and secondary data) and the findings obtained on interdependent subjects (such as levels of service loads and municipal public service costs). The final report will consist of specific reports on each case study municipality and any single impact studies outside these selected municipalities, as well as the major synthesis of all local public policy impacts. The interpretation will identify the manner in which changes in transit service, traffic patterns, school financing, zoning regulations, redevelopment projects, etc., resulting from BART and the public response to it hinder or assist the realization of general municipal policies and goals, and will make suggestions on how transportation investments coupled with specific governmental policies can be employed to further

the realization of aggregate community goals concerning development and environmental policies.

5.11 Local Policy Implications of BART Impacts

Purpose

The Local Policy Implications (LPI) Work Element will clarify the significance of BART impacts for local government policy decision making and integrate these findings into a single comprehensive report. The LPI task is part of the BART Impact Program's technical integrating activity. The purpose of technical integration is to examine the work and results of all other BIP projects and technical activities in order to analyze and interpret from a broad perspective how all observed BART impacts interact. Each of the technical integration efforts has a focused perspective or theme, the theme of the LPI task being interpretation of BART impacts for local governmental policy.

The focus of the work in this project will not be impact assessment, i.e., survey or other "measurement" of effects of BART. Rather, the LPI task will interpret impacts observed in the six major assessment projects described in Section 1.2 of this Research Plan. Results of each of the six major impact assessment project as well as other BIP technical assessment activities will be reviewed and analyzed. The LPI task will be directed towards interpreting, integrating and synthesizing results from all BIP projects into a summary of the implications of these impacts of BART on local policy making.

1. Definition of Terms

The LPI task will deal with the implications or particular significances of the effects of BART planning and operation on local levels of government and their constituencies. Here "implications" is intended to mean interpretation of effects or BIP identified impacts for a specified audience as opposed to impact assessment.

The local policies of interest are those of municipal, county, regional, special district, and state governments. Federal government policies are specifically excluded; a separate BIP technical activity is concurrently assessing the implications of BART impacts for Federal policy.

The local governments are not restricted to those in the Bay Area or the State of California; this task will consider generic types of local government.

Policies are the normal administrative, executive, legislative or judicial decisions which guide activity of the community.

2. Objective

This Work Element has two major objectives. The first is to identify those BART impacts as defined in the six BIP impact assessment projects which will provide the most useful information for making local decisions regarding rapid transit. The second objective is to interpret impacts identified in all other Program activities in a unified way, integrating results from other work areas of limited scope into broad conclusions about BART imapcts on local policy development. This will require combining results from each sector of BIP study in order to draw broader conclusions than are possible for the individual studies within their particular area of charge or discipline. It will present the opportunity for synthesis of additional results which are more apparent from the broad, overview perspective.

The findings of this LPI task are directed at a specific audience of policy makers. These include: (1) municipal and county public officials such as mayors, city managers, public administrators, city council members, county tax assessors, planners, and county commissioners; (2) regional and special district governments such as regional planning agencies, water and sewer districts, air pollution control agencies, transit districts and operators; and (3) State government departments concerned with highways and transportation, the environment and natural resources, housing and social services, and public officials at this level including legislators. The community of interested citizens at all levels is always a focus for the reporting of findings since the public at large is an integral part of the decision making process.

Research Activities

1. Technical Integration

This step will involve the integration and synthesis of all identified BART impacts of significance for local policy decision-making. This synthesis should be done with the basic concerns of the BART Impact Program in mind (Section 1.2). All BIP project and technical activity planning and report documents will be examined to determine the relevance of identified impacts for the LPI task. A list of sources to be reviewed will be prepared in conjunction with the MTC staff.

The main purpose of this activity is presentation of all impact findings for interpretation of their relevance to local policy decisions. All identified BART impacts may be categorized by local policy issue in order to integrate the findings of all BIP projects and technical activities into a logical order. The central categories of local policy issues should follow naturally from the review of project documents and should be comprehensive enough to inform the diverse audiences to whom this task is directed.

The integration of all BART impacts and eventual synthesis into a major report document should be done so that minor questions about possible government policy implications of BART can be easily obtained from the final report. This task, perhaps more than any other, is aimed at questions of the most general concern for the broadest audience.

2. Interpretation - LPI Report

All collected data will be utlized in this final element, the interpretation of BART impact implications, for state, regional, and municipal policy formulation. This Report will provide a synthesis of all identified BART impacts and integrate these into a comprehensive report focused on the relevance of BART impacts for local governmental policy decisions.

The findings will be summarized for the Public Policy Project Final Report. Special attention should be paid to defining specific audiences to whom the LPI report is directed. Also, in keeping with the general BIP objectives, minority concerns should be included in the implications reporting.

6. WORK PLAN

The following section provides general information on how the work described in the preceding sections should be performed in terms of schedule, staffing, and level of effort. A tentative schedule for accomplishing the research outlined in the Work Elements is provided. A general staffing plan is outlined. And based on the knowledge acquired in developing a research effort for each part of the project, MTC has made estimates of relative level of effort to be expended in the various Work Elements.

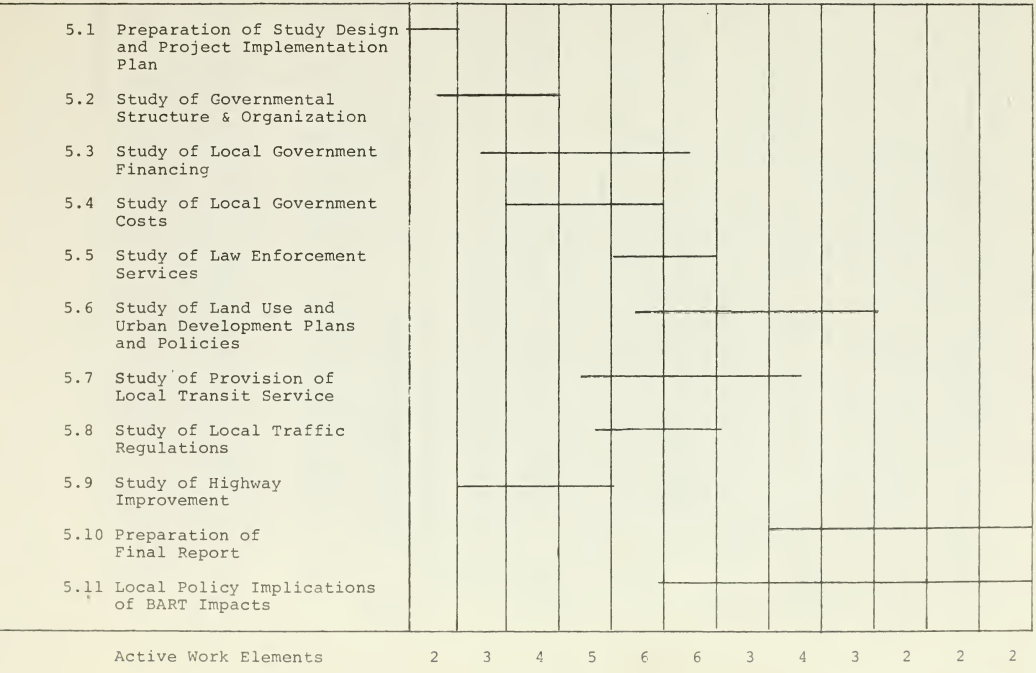
6.1 Schedule

The Public Policy Project will have a 12-month duration. The starting date for the project is expected to be in July 1976.

Figure 3 is a tentative schedule for project Work Elements. Preparation of the Study Design and the Project Implementation Plan (5.1) will be completed by MTC prior to contract initiation. The draft of that document shall be refined by the contractor, and management, cost and schedule details added in the first month of the contract effort. The final approved document must be submitted by the end of the first month. The studies of governmental structure (5.2) and highway improvements (5.9) can begin early in the second month since they are initially independent of any input from other BIP projects or Work Elements. Studies of local government financing (5.3) and local government costs (5.4) are scheduled to coincide with preliminary data collection by the Economics and Finance Project and range over a period of many months to take advantage of that Project's transferable findings and analyses. Findings on public service costs will be of interest to the studies of traffic regulation (5.8), local transit service (5.7), and law enforcement (5.5). The study of law enforcement is relatively minor and is scheduled in the middle of the Project to coincide with the draft Community Monitoring report by the Environment Project. The study of land use impacts (5.6) is a major research effort but the Land Use and Urban Development Project should provide early findings and possibly data on unanticipated impacts by the fifth month. Work Elements 5.7 (Local Transit Service), 5.8 (Traffic Regulations), and to some extent, 5.9 (Highway Improvements) will be supplied with data by the Transportation System and Travel Behavior and being parallel in scope, they will be studied jointly. The Final Report (5.10) will pull together the findings of impacts in the case study municipalities from the other Work Elements and provide comprehensive interpretation and recommendations for the various kinds of decision-makers to whom this project is directed. The Local Policy Implications Work Element (5.11) will likewise be a synthesis of impact findings but will instead integrate all the BIP impact assessment projects and technical activities. This Work Element is scheduled for a duration of seven months to provide sufficient time for BIP document review, analysis, and

Figure 3

Schedule of Work Elements



report writing.

The Work Elements have been scheduled in such a way that project activity increases moderately the first few months, levels off at the project mid-point and diminishes in active Work Elements later in the project when most of the effort is devoted to the final report and the Local Policy Implications Report.

6.2 Project Office

The Public Policy Project contractor who is selected will be expected to maintain an office in the San Francisco Bay Area for the duration of the contract. This requirement is to assure a close working relationship with the BART Impact Program staff and other contractors and consultants.

6.3 Staffing

The consultant team should consist of a part-time technical director, a project manager whose predominant assignment will be this Project, and additional research and technical personnel as needed. Part-time services of specially qualified persons drawn from the contractor's staff, from subcontractors, or other consultants are also permitted.

The project manager is the key individual in the consultant team. He should provide the project with both technical and administrative direction and be MTC's point of contact for all matters dealing with project performance. The technical director is expected to provide high level direction in matters dealing with the overall research approach. Heavier commitments are expected from senior and junior research analysts.

6.4 Level of Effort

The Metropolitan Transportation Commission considers a level of effort between 25 and 30 person-months, over a 12-month period, to be appropriate for performance of the Public Policy Project. In order to provide an indication of level of effort among the various Work Elements, Figure 4 presents a tentative distribution of project resources. A final project budget will be based on more precise estimate resource requirements, staff skills, overhead and other costs.

Figure 4

Approximate Level of Effort

Work Element	Per Cent Level of Effort
1. Study Design and Project Implementation Plan	1
2. Governmental Structure and Organization	4
3. Local Government Financing	7
4. Local Government Costs	5
5. Law Enforcement Service	3
6. Land Use and Urban Development Plans and Policies	10
7. Provision of Local Transit Service	7
8. Local Traffic Regulations	3
9. Highway Improvements	5
10. Final Report	15
11. Local Policy Implications of BART Impact	40